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LOGINID:ssptakxm1743

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * * * Welcome to STN International * * * * * * * * *

NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 NOV 21 CAS patent coverage to include exemplified prophetic substances identified in English-, French-, German-, and Japanese-language basic patents from 2004-present
NEWS 3 NOV 26 MARPAT enhanced with FSORT command
NEWS 4 NOV 26 CHEMSAFE now available on STN Easy
NEWS 5 NOV 26 Two new SET commands increase convenience of STN searching
NEWS 6 DEC 01 ChemPort single article sales feature unavailable
NEWS 7 DEC 12 GBFULL now offers single source for full-text coverage of complete UK patent families
NEWS 8 DEC 17 Fifty-one pharmaceutical ingredients added to PS
NEWS 9 JAN 06 The retention policy for unread STNmail messages will change in 2009 for STN-Columbus and STN-Tokyo
NEWS 10 JAN 07 WPIDS, WINDEX, and WPIX enhanced Japanese Patent Classification Data
NEWS 11 FEB 02 Simultaneous left and right truncation (SLART) added for CERAB, COMPUB, ELCOM, and SOLIDSTATE
NEWS 12 FEB 02 GENBANK enhanced with SET PLURALS and SET SPELLING
NEWS 13 FEB 06 Patent sequence location (PSL) data added to USGENE
NEWS 14 FEB 10 COMPENDEX reloaded and enhanced
NEWS 15 FEB 11 WTEXTILES reloaded and enhanced
NEWS 16 FEB 19 New patent-examiner citations in 300,000 CA/CAplus patent records provide insights into related prior art
NEWS 17 FEB 19 Increase the precision of your patent queries -- use terms from the IPC Thesaurus, Version 2009.01
NEWS 18 FEB 23 Several formats for image display and print options discontinued in USPATFULL and USPAT2
NEWS 19 FEB 23 MEDLINE now offers more precise author group fields and 2009 MeSH terms
NEWS 20 FEB 23 TOXCENTER updates mirror those of MEDLINE - more precise author group fields and 2009 Mesh terms
NEWS 21 FEB 23 Three million new patent records blast AEROSPACE into STN patent clusters

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 17:28:15 ON 23 FEB 2009

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=> file registry
COST IN U.S. DOLLARS                               SINCE FILE      TOTAL
                                                    ENTRY        SESSION
FULL ESTIMATED COST                           1.10          1.10
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FILE 'REGISTRY' ENTERED AT 17:30:53 ON 23 FEB 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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STRUCTURE FILE UPDATES: 22 FEB 2009 HIGHEST RN 1110296-20-2
DICTIONARY FILE UPDATES: 22 FEB 2009 HIGHEST RN 1110296-20-2

New CAS Information Use Policies. enter HELP USAGETERMS for details.

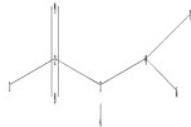
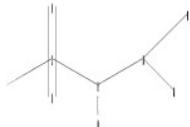
TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stn/gen/stndoc/properties.html>

=>
Uploading C:\Program Files\STNEXP\Queries\10511409.str



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chain nodes :
1 2 3 4 5 6 7 8 9
chain bonds :
1-2 2-3 2-8 2-9 3-4 3-5 4-6 4-7
exact/norm bonds :
1-2 2-3 2-8 2-9 3-4
exact bonds :
3-5 4-6 4-7

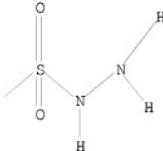
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Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED - 2788 TO ITERATE

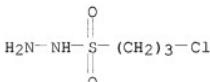
71.7% PROCESSED 2000 ITERATIONS 4 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
PROJECTED ITERATIONS: 52593 TO 58927
PROJECTED ANSWERS: 4 TO 252

L2 4 SEA SSS SAM L1

=> d scan

L2 4 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN 1-Propanesulfonic acid, 3-chloro-, hydrazide
MF C3 H9 Cl N2 O2 S



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s l1 sss full
FULL SEARCH INITIATED 17:37:28 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 53066 TO ITERATE

100.0% PROCESSED 53066 ITERATIONS
SEARCH TIME: 00.00.01

87 ANSWERS

L3 87 SEA SSS FUL L1

=> s l3 and derivatization
0 DERIVATIZATION
L4 0 L3 AND DERIVATIZATION

=> s l3 and ketosteroiD
72 KETOSTEROID
L5 0 L3 AND KETOSTEROID

=> s l3 and estrogen
1842 ESTROGEN
L6 0 L3 AND ESTROGEN

=> s l3/arg
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Answer sets created in a different file may be field qualified with a limited set of qualifiers. Enter HELP CROSSOVER at an arrow prompt (>) for specific information.

=> s l3/arg
'ARG' IS NOT A VALID CROSSOVER QUALIFIER FOR L3
Answer sets created in a different file may be field qualified with a limited set of qualifiers. Enter HELP CROSSOVER at an arrow prompt (>) for specific information.

=> s L3/arg
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Answer sets created in a different file may be field qualified with a limited set of qualifiers. Enter HELP CROSSOVER at an arrow prompt (>) for specific information.

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'ANST' IS NOT A VALID CROSSOVER QUALIFIER FOR L3
Answer sets created in a different file may be field qualified with a limited set of qualifiers. Enter HELP CROSSOVER at an arrow prompt (>) for specific information.

=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
FULL ESTIMATED COST ENTRY SESSION
209.13 210.23

FILE 'CAPLUS' ENTERED AT 17:40:45 ON 23 FEB 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 23 Feb 2009 VOL 150 ISS 9
FILE LAST UPDATED: 22 Feb 2009 (20090222/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13 and derivatization
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 27938 DERIVATIZATION
L7 0 L3 AND DERIVATIZATION

=> s 13 and estrogen
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 90884 ESTROGEN
L8 0 L3 AND ESTROGEN

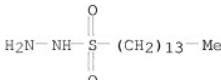
=> s 13 and ketosteroiD
 141 L3
 1496 KETOSTEROID
L9 0 L3 AND KETOSTEROID

=> s 13/arg
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 206526 ARG/RL
L10 0 L3/ARG
 (L3 (L) ARG/RL)

=> s 13/anst
 141 L3
 1253464 ANST/RL
L11 0 L3/ANST
 (L3 (L) ANST/RL)

=> d scan 13
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

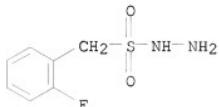
L3 87 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN 1-Tetradecanesulfonic acid, hydrazide
MF C14 H32 N2 O2 S



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

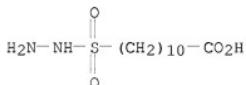
L3 87 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN Benzenemethanesulfonic acid, 2-fluoro-, hydrazide
MF C7 H9 F N2 O2 S
CI COM



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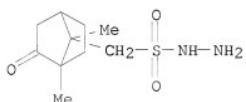
L3 87 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN Undecanoic acid, 11-(hydrazinosulfonyl)- (9CI)
MF C11 H24 N2 O4 S



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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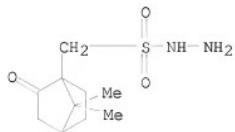
L3 87 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN Bicyclo[2.2.1]heptane-7-methanesulfonic acid, 1,7-dimethyl-2-oxo-,
hydrazide, anti- (9CI)
MF C10 H18 N2 O3 S



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):

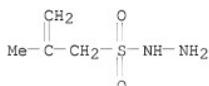
L3 87 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN Bicyclo[2.2.1]heptane-1-methanesulfonic acid, 7,7-dimethyl-2-oxo-,
hydrazide, (1S)- (9CI)
MF C10 H18 N2 O3 S



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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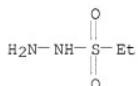
L3 87 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN 2-Propene-1-sulfonic acid, 2-methyl-, hydrazide
MF C4 H10 N2 O2 S



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 87 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN Ethanesulfonic acid, hydrazide
MF C2 H8 N2 O2 S



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE
ENTRY TOTAL
SESSION

FULL ESTIMATED COST

0.50

225.87

FILE 'CAPLUS' ENTERED AT 17:45:43 ON 23 FEB 2009
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FILE COVERS 1907 - 23 Feb 2009 VOL 150 ISS 9
FILE LAST UPDATED: 22 Feb 2009 (20090222/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s 13 and derivatize
    141 L3
    512 DERIVATIZE
L12      0 L3 AND DERIVATIZE

=> s 13 and derivatization
    141 L3
    27938 DERIVATIZATION
L13      0 L3 AND DERIVATIZATION

=> s 13 and carbonyl
    141 L3
    186588 CARBONYL
L14      12 L3 AND CARBONYL

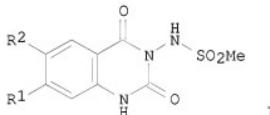
=> d ibib abs hitstr 1-
YOU HAVE REQUESTED DATA FROM 12 ANSWERS - CONTINUE? Y/(N):y

L14 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:1093812 CAPLUS
DOCUMENT NUMBER: 145:419171
TITLE: Preparation of 1H-quinazoline-2,4-diones as AMPA-receptor ligands
INVENTOR(S): Allgeier, Hans; Auberson, Yves; Carcache, David;
Floersheim, Philipp; Guibourdenche, Christel; Froestl,
Wolfgang; Kallen, Joerg; Koller, Manuel; Matthes,
Henri; Novak, Joachim; Orain, David; Renaud, Johanne
PATENT ASSIGNEE(S): Novartis A.-G.; Switz.; Novartis Pharma G.m.b.H.
SOURCE: PCT Int. Appl., 157pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
```

LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|------------|
| WO 2006108591 | A1 | 20061019 | WO 2006-EP3251 | 20060410 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| AU 2006233639 | A1 | 20061019 | AU 2006-233639 | 20060410 |
| CA 2601986 | A1 | 20061019 | CA 2006-2601986 | 20060410 |
| EP 1871749 | A1 | 20080102 | EP 2006-724185 | 20060410 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR | | | | |
| JP 2008536839 | T | 20080911 | JP 2008-505790 | 20060410 |
| IN 2007DN06940 | A | 20070928 | IN 2007-DN6940 | 20070907 |
| US 20080153836 | A1 | 20080626 | US 2007-911040 | 20071009 |
| MX 200712592 | A | 20071116 | MX 2007-12592 | 20071010 |
| KR 2007110919 | A | 20071120 | KR 2007-723171 | 20071010 |
| CN 101155789 | A | 20080402 | CN 2006-80011666 | 20071011 |
| NO 2007005749 | A | 20080111 | NO 2007-5749 | 20071109 |
| PRIORITY APPLN. INFO.: | | | GB 2005-7298 | A 20050411 |
| | | | WO 2006-EP3251 | W 20060410 |

OTHER SOURCE(S): MARPAT 145:419171
 GI



AB Title compds. represented by the formula I [wherein R1 = CF3, CHF2, CH2F, etc.; R2 = (un)substituted (heterocyclyl)alkyl, heterocyclyl or phenyl; and their salts thereof] were prepared as AMPA-receptor ligands. For example, I (R1 = CF3, R2 = MeCO) was provided in a multi-step synthesis starting from 2-nitro-4-trifluoromethylbenzoic acid. I [R1 = CF3, R2 = EtOCH(Me)] showed AMPA-receptor binding activity with IC50 value of 1 μ M. Thus, title compds. and their pharmaceutical compns. are useful as AMPA-receptor ligands, in particular for the treatment of epilepsy or schizophrenia (no data).

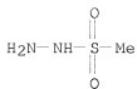
IT 10393-86-9, Methanesulfonyl hydrazide

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of 1H-quinazoline-2,4-diones as AMPA-receptor ligands)

RN 10393-86-9 CAPLUS

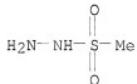
CN Methanesulfonic acid, hydrazide (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

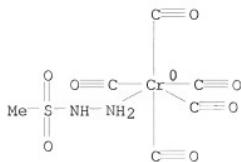
L14 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:474653 CAPLUS

DOCUMENT NUMBER: 141:431312
TITLE: Synthesis and Characterization of Metal Carbonyl Complexes of M(CO)₆ (M = Cr, Mo, and W), Re(CO)5Br, and Mn(CO)3Cp with Acetone methanesulfonylhydrazone (amsh) and Methanesulfonylhydrazine (msh)
AUTHOR(S): Oezdemir, Uemmuehan; Karacan, Nurcan; Sentuerk, Ozan Sanli; Sert, Sema; Ugur, Fadime
CORPORATE SOURCE: Department of Chemistry, Faculty of Science and Literature, Gazi University, Ankara, Turk.
SOURCE: Synthesis and Reactivity in Inorganic and Metal-Organic Chemistry (2004), 34(6), 1057-1067
PUBLISHER: Marcel Dekker, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 141:431312
AB Ten new complexes, [M(CO)₅(amsh)] [M = Cr (1a), Mo (2a), W (3a)], [Re(CO)4Br(amsh)] (4a), and [Mn(CO)₂(amsh)Cp] (5a) and [M(CO)₅(msh)] [M = Cr (1b), Mo (2b), W (3b)], [Re(CO)4Br(msh)] (4b), and [Mn(CO)₃(msh)] (5b), were synthesized by the photochem. reaction of the metal carbonyls [M(CO)₆] (M = Cr, Mo, and W), [Re(CO)5Br], and [Mn(CO)3Cp] with acetone methanesulfonylhydrazone (amsh) and methanesulfonylhydrazine (msh). The complexes were characterized by elemental analyses, mass spectrometry, FTIR and ¹H NMR spectroscopy. The spectroscopic studies show that amsh and msh behave as a monodentate ligands coordinating via an imine N donor atom in (1a)-(5a) and a hydrazine N donor atom in (1b)-(5b).
IT 10393-86-9, Methanesulfonylhydrazine
RL: RCT (Reactant); RACT (Reactant or reagent)
(photochem. substitution of transition metal carbonyls)
RN 10393-86-9 CAPLUS
CN Methanesulfonic acid, hydrazide (CA INDEX NAME)

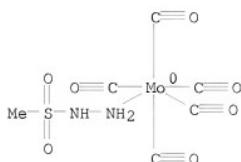


IT 796043-52-2P 796043-53-3P 796043-54-4P
796043-55-5P 796043-56-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

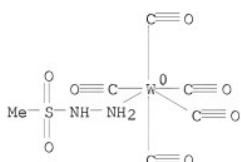
RN 796043-52-2 CAPLUS
CN Chromium, pentacarbonyl(methanesulfonic acid hydrazide- κ N₂)-,
(OC-6-22)- (9CI) (CA INDEX NAME)



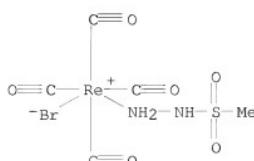
RN 796043-53-3 CAPLUS
 CN Molybdenum, pentacarbonyl(methanesulfonic acid hydrazide- $\kappa\text{N}2$)-,
 (OC-6-22)- (9CI) (CA INDEX NAME)



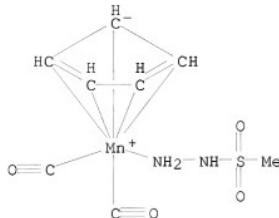
RN 796043-54-4 CAPLUS
 CN Tungsten, pentacarbonyl(methanesulfonic acid hydrazide- $\kappa\text{N}2$)-,
 (OC-6-22)- (9CI) (CA INDEX NAME)



RN 796043-55-5 CAPLUS
 CN Rhenium, bromotetracarbonyl(methanesulfonic acid hydrazide- $\kappa\text{N}2$)-
 (9CI) (CA INDEX NAME)



RN 796043-56-6 CAPLUS
 CN Manganese, dicarbonyl(η^5 -2,4-cyclopentadien-1-yl)(methanesulfonic acid

hydrazide- κ N2)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:308409 CAPLUS

DOCUMENT NUMBER: 140:321108

TITLE: Preparation of aryl cyclohexyl sulfones as γ -secretase inhibitors useful against Alzheimer's disease

INVENTOR(S): Churcher, Ian; Harrison, Timothy; Kerrad, Sonia; Oakley, Paul Joseph; Shaw, Duncan Edward; Teall, Martin Richard; Williams, Susannah

PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK

SOURCE: PCT Int. Appl., '78 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

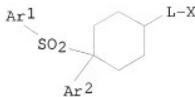
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PATENT INFORMATION:

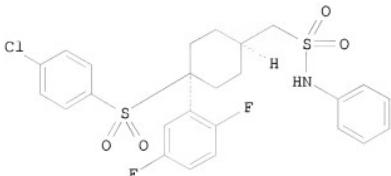
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------------|-----------------|----------|
| WO 2004031137 | A1 | 20040415 | WO 2003-GB4102 | 20030925 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SI, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2500964 | A1 | 20040415 | CA 2003-2500964 | 20030925 |
| AU 2003267614 | A1 | 20040423 | AU 2003-267614 | 20030925 |
| EP 1551797 | A1 | 20050713 | EP 2003-748306 | 20030925 |
| EP 1551797 | B1 | 20070221 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| JP 2006501292 | T | 20060112 | JP 2004-540927 | 20030925 |
| AT 354562 | T | 20070315 | AT 2003-748306 | 20030925 |
| US 20040122050 | A1 | 20040624 | US 2003-679557 | 20031006 |
| US 7101895 | B2 | 20060905 | | |
| PRIORITY APPLN. INFO.: | | | | |
| | | GB 2002-23339 | A 20021004 | |
| | | WO 2003-GB4102 | W 20030925 | |

OTHER SOURCE(S):
GI

CASREACT 140:321108; MARPAT 140:321108



I



II

AB Aryl cyclohexyl sulfones (shown as I; variables defined below; e.g. II) inhibit the processing of APP by γ -secretase, and hence are useful in treatment of Alzheimer's disease. For I: X = SCN, SR1, S(O)R1, (CRaRb)SO2R1, SO2N(R2)2, SO2NHCOR1, SO2NNH(R2)2, OSO2N(R2)2, OS(O)N(R2)2, OSO2NHCOR1, COR4, NHCOR1, NHCO2R1, NHCON(R2)2, NHSO2R1 or NHSO2N(R2)2; L = a bond, :CH- or -(CHRa)n- with provisos; n = 1-3; Ar1 and Ar2 = Ph or heteroaryl, either of which bears 0-3 halogen, CN, NO2, CF3, CHF2, OH, OCF3, CHO, CH:NOH, Cl-4-alkoxy, Cl-4-alkoxycarbonyl, C2-6-acyl, C2-6-alkenyl, and Cl-4-alkyl; Ra = H, alkyl; Rb = H, alkyl, CO2H, alkoxy carbonyl, alkylsulfonyl; R1 = CF3, (substituted) alkyl, alkenyl, cycloalkyl, cycloalkylalkyl, aryl(alkyl), heterocyclic(alkyl); R2 = H, (substituted) alkoxy, alkyl, alkenyl, cycloalkyl, cycloalkylalkyl; R3 = H, alkyl, Ph, heteroaryl; R4 = CRaRbSO2R1, pyridine N-oxide, substituted Ph, heteroaryl; addnl. details are given in the claims. Although the methods of preparation are not claimed, example preps. and/or characterization data are included for <180 examples of I and some intermediates. For example, II was prepared from excess aniline and [cis-4-(4-chlorobenzenesulfonyl)-4-(2,5-difluorophenyl)cyclohexyl]methanesulfonyl chloride, which was prepared from SO2C12, KNO3 and [cis-4-(4-chlorobenzenesulfonyl)-4-(2,5-difluorophenyl)cyclohexyl]methanethiol, which was prepared from in 2 steps from iodo[cis-4-(4-chlorobenzenesulfonyl)-4-(2,5-difluorophenyl)cyclohexyl]methane, which was prepared photochem. from [cis-4-(4-Chlorophenylsulfonyl)-4-(2,5-difluorophenyl)cyclohexyl]acetic acid, iodoisobenzene diacetate and I2. The examples all had an ED50 against γ -secretase of <1 μ M, typically <0.5 μ M, in most cases <100 nM, and in preferred cases <10 nM.

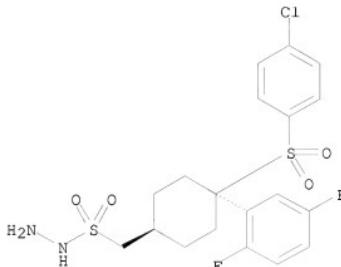
IT 679431-38-0P, cis-1-(4-Chlorophenylsulfonyl)-1-(2,5-difluorophenyl)-4-[(hydrazinyl)sulfonyl]methylcyclohexane
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of aryl cyclohexyl sulfones as γ -secretase inhibitors useful against Alzheimer's disease)

RN 679431-38-0 CAPLUS

CN Cyclohexanemethanesulfonic acid, 4-[(4-chlorophenyl)sulfonyl]-4-(2,5-difluorophenyl)-, hydrazide, cis- (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2000:133658 CAPLUS
 DOCUMENT NUMBER: 132:194391
 TITLE: Preparation of sulfonyl moiety-containing heterocyclic compounds as factor Xa inhibitors
 INVENTOR(S): Kobayashi, Syozo; Komoriya, Satoshi; Hagiwara, Noriyasu; Suzuki, Masanori; Yoshino, Toshiharu; Nagahara, Takayasu; Nagata, Tsutomu; Horino, Haruhiko; Ito, Masayuki; Mochizuki, Akiyoshi
 PATENT ASSIGNEE(S): Daiichi Pharmaceutical Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 883 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------------|-----------------|----------|
| WO 2000009480 | A1 | 20000224 | WO 1999-JP4344 | 19990811 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JE, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| JP 2000119253 | A | 20000425 | JP 1999-226878 | 19990810 |
| CA 2340100 | A1 | 20000224 | CA 1999-2340100 | 19990811 |
| AU 9951963 | A | 20000306 | AU 1999-51963 | 19990811 |
| EP 1104754 | A1 | 20010606 | EP 1999-937024 | 19990811 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2000143623 | A | 20000526 | JP 1999-242814 | 19990830 |
| US 6747023 | B1 | 20040608 | US 2001-762888 | 20010212 |
| US 20040082611 | A1 | 20040429 | US 2003-681205 | 20031009 |
| PRIORITY APPLN. INFO.: | | | | |
| | | JP 1998-227449 | A 19980811 | |
| | | JP 1998-244175 | A 19980828 | |
| | | JP 1998-251674 | A 19980904 | |

OTHER SOURCE(S):

MARPAT 132:194391

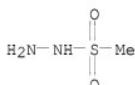
AB The title compds. Q1Q2T1Q3S02QA [wherein Q1 is an optionally substituted, saturated or unsatd., five- or six-membered cyclic hydrocarbon group, a five- or six-membered heterocyclic group, or the like; Q2 is a single bond, oxygen, sulfur, C1-C6 alkylene or the like; Q3 is a heterocyclic ring (represented by several generic structures); QA is optionally substituted arylalkenyl, heteroarylalkenyl or the like; and T1 is carbonyl or the like] are prepared. These compds. have potent factor Xa inhibiting effects and promptly exert satisfactory and persistent antithrombotic effects through oral administration, thus being useful as anticoagulant agents little accompanied with side effects. Several compds. of this invention in vitro showed IC50 values of 0.7 nM to 4.7 nM against factor Xa.

IT 259810-19-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of sulfonyl moiety-containing heterocyclic compds. as factor Xa inhibitors)

RN 259810-19-0 CAPLUS

CN Methanesulfonic acid, hydrazide, hydrochloride (1:1) (CA INDEX NAME)



● HCl

REFERENCE COUNT: 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:549377 CAPLUS

DOCUMENT NUMBER: 127:161997

ORIGINAL REFERENCE NO.: 127:31411a,31414a

TITLE: Carbamoyloxy derivatives of mutilin and their use as antibacterials

INVENTOR(S): Hinks, Jeremy David; Takle, Andrew Kenneth; Hunt, Eric

PATENT ASSIGNEE(S): Smithkline Beecham Plc, UK; Hinks, Jeremy David; Takle, Andrew Kenneth; Hunt, Eric

SOURCE: PCT Int. Appl., 164 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

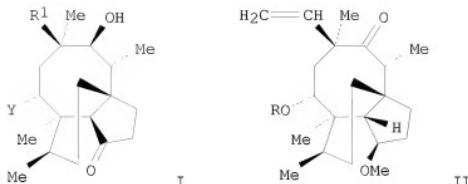
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9725309 | A1 | 19970717 | WO 1996-EP5874 | 19961219 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, | | | | |

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| IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
MR, NE, SN, TD, TG | | | | |
| CA 2240467 | A1 | 19970717 | CA 1996-2240467 | 19961219 |
| AU 9713078 | A | 19970801 | AU 1997-13078 | 19961219 |
| AU 715229 | B2 | 20000120 | | |
| EP 874809 | A1 | 19981104 | EP 1996-944684 | 19961219 |
| EP 874809 | B1 | 20030827 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, FI, RO | | | | |
| CN 1214039 | A | 19990414 | CN 1996-180177 | 19961219 |
| BR 9612426 | A | 19990713 | BR 1996-12426 | 19961219 |
| HU 9900973 | A2 | 19990830 | HU 1999-973 | 19961219 |
| HU 9900973 | A3 | 20000428 | | |
| JP 2000503642 | T | 20000328 | JP 1997-524826 | 19961219 |
| JP 4163254 | B2 | 20081008 | | |
| HU 2000001741 | A2 | 20001028 | HU 2000-1741 | 19961219 |
| HU 2000001741 | A3 | 20001128 | | |
| AT 248143 | T | 20030915 | AT 1996-944684 | 19961219 |
| ES 2205072 | T3 | 20040501 | ES 1996-944684 | 19961219 |
| ZA 9700017 | A | 19980702 | ZA 1997-17 | 19970102 |
| IN 1997MA00014 | A | 20050304 | IN 1997-MA14 | 19970103 |
| AP 872 | A | 20000928 | AP 1997-1047 | 19970721 |
| W: BW, GM, GH, KE, LS, MW, SD, SZ, UG, ZM, ZW | | | | |
| CA 2262460 | A1 | 19980212 | CA 1997-2262460 | 19970729 |
| WO 9805659 | A1 | 19980212 | WO 1997-EP4166 | 19970729 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JE, KE, KG, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US,
UZ, VN, YU, ZW | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9742036 | A | 19980225 | AU 1997-42036 | 19970729 |
| EP 934316 | A1 | 19990811 | EP 1997-940050 | 19970729 |
| EP 934316 | B1 | 20021016 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, FI | | | | |
| BR 9711008 | A | 19990817 | BR 1997-11008 | 19970729 |
| CN 1231665 | A | 19991013 | CN 1997-198347 | 19970729 |
| NZ 333926 | A | 20000526 | NZ 1997-333926 | 19970729 |
| JP 2000515532 | T | 20001121 | JP 1998-507584 | 19970729 |
| JP 4204069 | B2 | 20090107 | | |
| AT 226203 | T | 20021115 | AT 1997-940050 | 19970729 |
| ES 2182114 | T3 | 20030301 | ES 1997-940050 | 19970729 |
| ZA 9706817 | A | 19990201 | ZA 1997-6817 | 19970731 |
| NO 9803074 | A | 19980831 | NO 1998-3074 | 19980702 |
| US 6020368 | A | 20000201 | US 1998-101210 | 19981204 |
| NO 9900463 | A | 19990201 | NO 1999-463 | 19990201 |
| KR 2000029748 | A | 20000525 | KR 1999-700856 | 19990201 |
| US 6239175 | B1 | 20010529 | US 1999-467695 | 19991221 |
| PRIORITY APPLN. INFO.: | | | | |
| | | GB 1996-48 | A 19960103 | |
| | | GB 1996-16305 | A 19960802 | |
| | | WO 1996-EP5874 | W 19961219 | |
| | | GB 1997-12963 | A 19970619 | |
| | | WO 1997-EP4166 | W 19970729 | |
| | | US 1998-101210 | A3 19981204 | |

OTHER SOURCE(S):

MARPAT 127:161997

GI



AB Derivs. of mutilin of formula [I; Y = (un)substituted carbamoyloxy; R1 = vinyl, Et] and their pharmaceutically acceptable salts, useful in the treatment of bacterial infections (no data), are prepared. Thus, (3R)-epimutilin derivative II (R = H) was treated with Ph isocyanate in CH₂C₂ containing N,N-diisopropylethylamine at room temperature for 7 days to give II

(R = PhNHCO), which in dioxane was treated with a saturated solution of ZnCl₂ in concentrated HCl to give the title compound mutilin 14-phenylcarbamate.

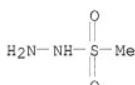
IT 10393-86-9, Methanesulfonyl hydrazide

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of carbamoyloxymutilins as antibacterials)

RN 10393-86-9 CAPLUS

CN Methanesulfonic acid, hydrazide (CA INDEX NAME)



L14 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1993:142111 CAPLUS

DOCUMENT NUMBER: 118:142111

ORIGINAL REFERENCE NO.: 118:24332a

TITLE: Hydrazine group-containing inhibitors of nonenzymatic cross-linking

INVENTOR(S): Ulrich, Peter C.; Cerami, Anthony

PATENT ASSIGNEE(S): Rockefeller University, USA

SOURCE: U.S., 11 pp. Cont.-in-part of 4,983,604.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 33

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| US 5140048 | A | 19920818 | US 1990-605654 | 19901030 |
| EP 322402 | A2 | 19890628 | EP 1989-102406 | 19850319 |
| EP 322402 | A3 | 19891025 | | |
| EP 322402 | B1 | 19931124 | | |
| R: AT, BE, CH, DE, FR, GB, LI, LU, NL, SE | | | | |
| AT 97741 | T | 19931215 | AT 1989-102406 | 19850319 |
| US 5126442 | A | 19920630 | US 1991-638735 | 19910108 |
| US 5254593 | A | 19931019 | US 1991-807609 | 19911216 |

| | | | | |
|--|----|----------------|----------------|----------|
| US 5221683 | A | 19930622 | US 1992-822310 | 19920117 |
| JP 05172813 | A | 19930713 | JP 1992-51657 | 19920310 |
| US 5356895 | A | 19941018 | US 1992-889141 | 19920527 |
| US 5243071 | A | 19930907 | US 1992-890556 | 19920528 |
| US 5262152 | A | 19931116 | US 1992-890615 | 19920528 |
| US 5399560 | A | 19950321 | US 1992-956722 | 19921001 |
| US 5272165 | A | 19931221 | US 1992-998539 | 19921230 |
| WO 9313775 | A1 | 19930722 | WO 1993-US386 | 19930115 |
| W: AU, CA, JP | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| AU 9335840 | A | 19930803 | AU 1993-35840 | 19930115 |
| US 5612332 | A | 19970318 | US 1995-487059 | 19950607 |
| US 5811075 | A | 19980922 | US 1995-487398 | 19950607 |
| US 5852009 | A | 19981222 | US 1997-784861 | 19970116 |
| US 6114323 | A | 20000905 | US 1998-215612 | 19981217 |
| US 20020115724 | A1 | 20020822 | US 2001-954514 | 20010917 |
| PRIORITY APPLN. INFO.: | | | | |
| | | US 1984-590820 | A2 19840319 | |
| | | US 1985-798032 | A2 19851114 | |
| | | US 1987-119958 | A2 19871113 | |
| | | US 1988-264930 | A2 19881102 | |
| | | EP 1989-102406 | A 19850319 | |
| | | US 1986-907747 | B2 19860912 | |
| | | US 1987-91534 | A3 19870903 | |
| | | US 1988-220504 | B2 19880718 | |
| | | US 1989-453935 | A3 19891220 | |
| | | US 1989-453958 | B1 19891220 | |
| | | US 1990-481869 | A2 19900220 | |
| | | US 1990-605654 | A2 19901030 | |
| | | US 1990-606425 | A3 19901031 | |
| | | US 1991-697212 | A3 19910507 | |
| | | US 1991-697213 | A3 19910507 | |
| | | US 1991-709487 | B1 19910603 | |
| | | US 1991-805200 | A2 19911210 | |
| | | US 1992-822310 | A 19920117 | |
| | | US 1992-878837 | B1 19920505 | |
| | | US 1992-889141 | A3 19920527 | |
| | | US 1992-890556 | A3 19920528 | |
| | | WO 1993-US386 | A 19930115 | |
| | | US 1993-162840 | B1 19931203 | |
| | | US 1994-274243 | B2 19940713 | |
| | | US 1994-290680 | B1 19940815 | |
| | | US 1995-487059 | A2 19950607 | |
| | | US 1997-784861 | A1 19970116 | |
| | | US 1998-215612 | A1 19981217 | |
| | | US 2000-561541 | A3 20000428 | |

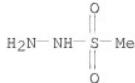
OTHER SOURCE(S): MARPAT 118:142111

AB Compns. and methods for inhibiting nonenzymic crosslinking of proteins are claimed. The compns. comprise RC(:O)NHNNH₂ (R=C₂-10 alkyl containing an addnl. acid functional group), which can react with the carbonyl moiety of the early glycosylation product of target proteins formed by their initial glycosylation. The method comprises contacting the target protein with the composition. The compns. can be used to prevent food spoilage and animal protein aging (no data). Many compds. were synthesized and tested for inhibition of glucose-mediated protein crosslinking in vitro as well as for lack of inhibition of diamine oxidase.

IT 10393-86-9, Methanesulfonic acid hydrazide
 RL: BIOL (Biological study)
 (nonenzymic protein glycosylation and crosslinking prevention with)

RN 10393-86-9 CAPLUS

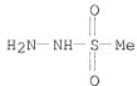
CN Methanesulfonic acid, hydrazide (CA INDEX NAME)



L14 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1990:204501 CAPLUS
 DOCUMENT NUMBER: 112:204501
 ORIGINAL REFERENCE NO.: 112:34459a,34462a
 TITLE: Aminoguanidine derivatives for preventing staining of teeth caused by nonenzymic browning of proteins
 INVENTOR(S): Cerami, Anthony; Yamin, Michael A.
 PATENT ASSIGNEE(S): Rockefeller University, USA
 SOURCE: Eur. Pat. Appl., 23 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------------|--|----------|-----------------|------------|
| EP 327919 | A2 | 19890816 | EP 1989-101577 | 19890130 |
| EP 327919 | B1 | 19930915 | | |
| R: AT, BE, CH,
CA 1332572 | DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | |
| AT 94379 | C | 19941018 | CA 1989-589143 | 19890125 |
| ES 2059576 | T | 19931015 | AT 1989-101577 | 19890130 |
| JP 07037373 | T3 | 19941116 | ES 1989-101577 | 19890130 |
| PRIORITY APPLN. INFO.: | B | 19950426 | JP 1989-20680 | 19890130 |
| | | | US 1988-149726 | A 19880129 |
| | | | US 1989-290938 | A 19890104 |
| | | | EP 1989-101577 | A 19890130 |

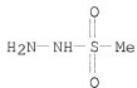
OTHER SOURCE(S): MARPAT 112:204501
 AB A method of inhibiting discoloration of teeth caused by the nonenzymic browning of proteins in the oral cavity comprises administration of an agent capable of reacting with the carbonyl moiety of the early glycosylation product formed by the initial glycosylation of the nonenzymic browning reaction. The agents are selected from the group consisting of aminoguanidine, β -hydrazinohistidine, lysine, and aminoguanidine derivs. A mixture containing bovine serum albumin, glucose, chlorhexidine, NaN3 and 100 mM aminoguanidine in a phosphate buffer (pH = 7.4) was incubated at 37° for 3 wk and bovine serum albumin was precipitated with saturated ammonium sulfate solution. The fluorescence of nonenzymic browning product was 15.2 as compared to 59.2 for the control with no aminoguanidine. An oral rinse contained aminoguanidine 1.4, chlorhexidine gluconate 0.12, EtOH 11.6, Na saccharin 0.15, FE & C Blue Number 1 0.001, peppermint oil 0.5, glycerin 10.0, Tween-60 0.3, and water up to 100%.
 IT 10393-86-9, Methanesulfonic acid hydrazide
 RL: BIOL (Biological study)
 (as tooth discoloration inhibitor for dentifrices)
 RN 10393-86-9 CAPLUS
 CN Methanesulfonic acid, hydrazide (CA INDEX NAME)



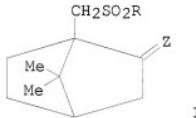
L14 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1990:151885 CAPLUS
 DOCUMENT NUMBER: 112:151885
 ORIGINAL REFERENCE NO.: 112:25479a,25482a
 TITLE: Inhibitors of nonenzymic crosslinking of proteins
 (protein aging)
 INVENTOR(S): Ulrich, Peter C.; Cerami, Anthony
 PATENT ASSIGNEE(S): Rockefeller University, USA
 SOURCE: Eur. Pat. Appl., 23 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 33
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|-------------|
| EP 316852 | A2 | 19890524 | EP 1988-118973 | 19881114 |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| AU 8824929 | A | 19890525 | AU 1988-24929 | 19881109 |
| US 5126442 | A | 19920630 | US 1991-638735 | 19910108 |
| WO 9313775 | A1 | 19930722 | WO 1993-US386 | 19930115 |
| W: AU, CA, JP | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| AU 9335840 | A | 19930803 | AU 1993-35840 | 19930115 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1987-119958 | A 19871113 |
| | | | US 1988-264930 | A 19881102 |
| | | | US 1989-453935 | A3 19891220 |
| | | | US 1992-822310 | A 19920117 |
| | | | WO 1993-US386 | A 19930115 |

OTHER SOURCE(S): MARPAT 112:151885
 AB A composition an agent capable of inhibiting the formation of advanced glycosylation end products of target proteins, by reacting with the carbonyl moiety of the early glycosylation product of such target proteins formed by their initial glycosylation. Suitable agents contain an active N-containing group, such as a hydrazine group. Particular agents comprise aminoguanidine derivs. Food spoilage and animal protein aging can be treated. A solution of Et hydrazinecarboximidothioate-HBr and 3-(4-morpholino)propylamine in EtOH was kept for 2 days and refluxed for 30 min, followed by the addition of iso-PrOH and HBr, to give N-[3-(4-morpholino)propyl]hydrazinecarboximidamide-2HBr (I). I (10 mM) inhibited the glucose-mediated crosslinking of bovine serum albumin by 41%.
 IT 10393-86-9, Methanesulfonic acid hydrazide
 RL: BIOL (Biological study)
 (protein glycosylation-inhibiting agent)
 RN 10393-86-9 CAPLUS
 CN Methanesulfonic acid, hydrazide (CA INDEX NAME)



L14 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1989:595098 CAPLUS
 DOCUMENT NUMBER: 111:195098
 ORIGINAL REFERENCE NO.: 111:32438h,32439a
 TITLE: Camphor- and 10-sulfonamidocamphor sulfonohydrazone
 and related compounds
 AUTHOR(S): Cremlyn, Richard; Bartlett, Martin; Lloyd, Jane
 CORPORATE SOURCE: Div. Chem. Sci., Hatfield Polytech.,
 Hatfield/Hertfordshire, AL10 9AB, UK
 SOURCE: Phosphorus and Sulfur and the Related Elements (1988),
 40(1-2), 91-7
 CODEN: PREEDF; ISSN: 0308-664X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 111:195098
 GI



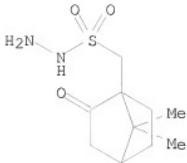
AB Camphor-10-sulfonyl chloride (I; R = Cl, Z = O) was converted into the hydrazide I (R = NHHNH₂, Z = O), the N-phenyl-I (R = NHNHPh, and N,N'-dimethylhydrazides I (R = NHNMe₂ Z = O); the former was characterized as the hydrazones I (R = NHN:CR1R₂, R₁ = H; R₂ = Ph, 4-MeC₆H₄, 4-MeOC₆H₄, 4-ClC₆H₄; R₁ = Me4R₂Ph) and the 3,5-dimethylpyrazole. Camphor-10-sulfonanilide I (X = NHPH, Z = O) and the morpholidate I (X = morpholino, Z = O) were condensed with NH₂NH₂·H₂O, to give the hydrazones I (R = NHPH, morpholino, Z = NHHNH₂) converted into the azines I (R = NHPH, morpholino, Z = NN:CR1R₂, R₁ = R₂ = Me, R₁ = H, R = Ph, 4-MeOC₆H₄, 4-O2NC₆H₄). Camphorhydrazone was similarly prepared, together with the azines I [R = NHPH, morpholino, ZNN:CR1R₂ R₁ = H, R₂ = 4-O2NC₆H₄, 4-MeC₆H₄, 4-Me2NC₆H₄, 3-HOC₆H₄, R₁ = R₂ = Me, R₁R₂ = (CH₂)₄]. The spectral data are briefly discussed together with the results of preliminary biol. screening.

IT 123286-39-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, bioactivity, and thermal cyclization or condensation of, with
 carbonyl compds.)

RN 123286-39-5 CAPLUS

CN Bicyclo[2.2.1]heptane-1-methanesulfonic acid, 7,7-dimethyl-2-oxo-,
 hydrazide (CA INDEX NAME)



L14 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1986:590776 CAPLUS
 DOCUMENT NUMBER: 105:190776
 ORIGINAL REFERENCE NO.: 105:30783a,30786a
 TITLE: 3-[(2-Amino-4-thiazolyl)acetamido]-2-oxo-1-azetidinesulfonic acid derivatives and their use
 INVENTOR(S): Treuner, Uwe Dietmar
 PATENT ASSIGNEE(S): E.R. Squibb and Sons, Inc., USA
 SOURCE: Eur. Pat. Appl., 52 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

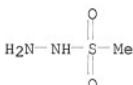
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|------------------------------|--------------------------------|--|-----------------|------------|
| EP 177940 | A2 | 19860416 | EP 1985-112762 | 19851008 |
| EP 177940 | A3 | 19880330 | | |
| EP 177940 | B1 | 19920506 | | |
| R: AT, BE, CH,
US 4610824 | DE, FR, GB, IT, LI, LU, NL, SE | | | |
| CA 1271749 | A | 19860909 | US 1984-658849 | 19841009 |
| JP 61091187 | A1 | 19900717 | CA 1985-491947 | 19851001 |
| JP 06047588 | A | 19860509 | JP 1985-225923 | 19851008 |
| AT 75743 | B | 19940622 | | |
| US 4680409 | T | 19920515 | AT 1985-112762 | 19851008 |
| CA 1285954 | A | 19870714 | US 1985-812658 | 19851223 |
| CA 06329648 | C2 | 19910709 | CA 1989-615542 | 19891026 |
| JP 07055938 | A | 19941129 | JP 1993-311610 | 19931213 |
| PRIORITY APPLN. INFO.: | | | US 1984-658849 | A 19841009 |
| | | | CA 1985-491947 | A 19851001 |
| | | | EP 1985-112762 | A 19851008 |
| OTHER SOURCE(S): GI | | CASREACT 105:190776; MARPAT 105:190776 | | |



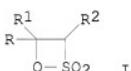
AB The title compds. I [R1, R2 = H, C1-4 alkyl, R1R2 with the C to which they are attached form a cycloalkyl; R3 = R4 = H, alkyl; R5 = H, alkyl, (un)substituted Ph, heterocycl, alkoxy carbonyl, etc.; R4R5 = CHY, Y = (un)substituted Ph; R6, R7 = H, alkyl, alkenyl, alkynyl, (un)substituted Ph, etc.] and their salts, useful against gram-neg. organisms (no data)

were prepared. Thus, $[3S-[3\alpha(Z),4\beta]]-3-[(2\text{-amino}-4\text{-thiazolyl})-$
 $[(1\text{-carboxy}-1\text{-methylmethoxy)imino}]\text{acetyl}] \text{amino}-4\text{-methyl}-2\text{-oxo}-1\text{-}$
 $\text{azetidinesulfonic acid, Bu}_3\text{N, N-hydroxybenzotriazole, and}$
 $\text{dimethylaminopyridine in DMF were reacted with}$
 $\text{N},\text{N-dicyclohexylcarbodiimide, followed by H}_2\text{NNHCO}_2\text{CMe}_3$ to give
 $[3S-[3\alpha(Z),4\beta]]\text{-I (R1-R4 = H, R5 = CO}_2\text{CMe}_3, \text{R6 = H, R7 = Me).}$

IT 10393-86-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with azetidinesulfonic acid derivative)
 RN 10393-86-9 CAPLUS
 CN Methanesulfonic acid, hydrazide (CA INDEX NAME)



L14 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1982:6623 CAPLUS
 DOCUMENT NUMBER: 96:6623
 ORIGINAL REFERENCE NO.: 96:1199a,1202a
 TITLE: β -Sultones, III: The preparation of
 1,2-oxathietane 2,2-dioxides (β -sultones) and
 their reactions with nucleophiles
 Hanefeld, Wolfgang; Kluck, Detlef
 Inst. Pharm. Chem., Univ. Hamburg, Hamburg, 2000/13,
 Fed. Rep. Ger.
 AUTHOR(S):
 CORPORATE SOURCE:
 SOURCE: Archiv der Pharmazie (Weinheim, Germany) (1981),
 314(9), 799-810
 DOCUMENT TYPE: CODEN: ARPMAZ; ISSN: 0365-6233
 LANGUAGE: Journal
 German
 OTHER SOURCE(S): CASREACT 96:6623
 GI



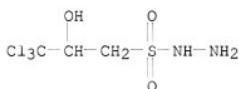
AB Oxathietane dioxides I ($R = CBr_3$, $R1 = H$, $R2 = Cl$; $R = R1 = CCIF_2$, $R2 = Cl$; $R = CCl_3$, $R1 = CF_3$, $R2 = H$) were prepared by treating RR_1CO with $R_2CH_2SO_2Cl$. $HOCRR_1CHR_2SO_2NR_3R_4$ (II, $R = CCl_3$, $CCIF_2$, CBr_3 ; $R1 = H$, CF_3 , $CCIF_2$; $R2 = H$, Cl , Br , Me ; $R3 = R4 = Me$, CH_2Ph ; NR_3R_4 = morpholino, piperidino) were obtained by aminolysis of I. Some II were O -acytulated. I ($R = CCl_3$, $R1 = R2 = H$) was converted to a variety of sulfonamides $HOCH(CCl_3)CH_2SO_2NR_5R_6$ (NR_5R_6 = amino).
 IT 80015-19-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 80015-19-6 CAPLUS
 CN 1-Propanesulfonic acid, 3,3,3-trichloro-2-hydroxy-, compd. with
 3,3,3-trichloro-2-hydroxy-1-propanesulfonic acid hydrazide (1:1) (CA

INDEX NAME)

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CRN 19422-53-8

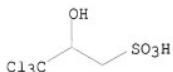
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CM 2

CRN 14500-55-1

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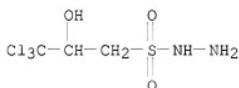


IT 19422-53-8

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with acetophenone)

RN 19422-53-8 CAPLUS

CN 1-Propanesulfonic acid, 3,3,3-trichloro-2-hydroxy-, hydrazide (CA INDEX
NAME)



L14 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1975:115908 CAPLUS

DOCUMENT NUMBER: 82:15908

ORIGINAL REFERENCE NO.: 82:2541a,2544a

TITLE: Mechanism of carbinolamine formation

AUTHOR(S): Sayer, J. M.; Pinsky, B.; Schonbrunn, A.; Washtien, W.

CORPORATE SOURCE: Grad. Dep. Biochem., Brandeis Univ., Waltham, MA, USA

SOURCE: Journal of the American Chemical Society (1974),

96(26), 7998-8008

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A general mechanism is described for carbinolamine formation that is consistent with kinetic and structure-reactivity data for the reaction of amines with substituted benzaldehydes. According to this mechanism, the addition reaction that is observed at pH values below neutrality proceeds by two sep. and concurrent paths. These are (I) general acid catalysis of amine

attack on the carbonyl group in a more-or-less concerted manner and (II) a stepwise process involving the uncatalyzed formation of a zwitterionic intermediate T_t, that is subsequently trapped by a kinetically significant proton transfer process involving acids or water. For weakly basic amines and/or aldehydes for which the value of K_{ad}, the equilibrium constant for neutral carbinolamine formation, is small, the predominant path of hydronium ion catalyzed carbinolamine formation is the concerted path, I. This pathway is characterized by rate consts. that are relatively insensitive to polar substituents on the aldehyde and the amine. For more strongly basic amines or amines and aldehydes with larger values of K_{ad}, the intermediate T_t for the stepwise path, II, is stabilized, and this path is favored relative to the concerted process. Contributions of the stepwise path to the observed rate of carbinolamine formation are exptl. shown by (a) breaks in pH-rate profiles indicative of changes in the rate-determining step that cannot be accounted for by the transition from carbinolamine formation to dehydration and (b) strong sensitivity of the observed rate consts. to polar substituents on the amine and the aldehyde under conditions where the stepwise proton transfer processes involving acids or water are kinetically significant. The pH-independent reaction that is ordinarily observed with weakly basic amines at moderately acidic pH values corresponds to a rate determining water-mediated proton switch that converts T_t to T₀. With hydrazine derivs. possessing an acidic H in the 2 position, unusually fast rates are observed for the pH-independent process and are attributed to a facile intramol. proton donation from N-2 of the substituted hydrazine moiety to the alcoholate O atom.

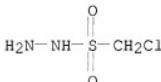
IT 28059-26-9

RL: PRP (Properties)

(carbinolamine formation with benzaldehydes, kinetics of)

RN 28059-26-9 CAPLUS

CN Methanesulfonic acid, 1-chloro-, hydrazide (CA INDEX NAME)



=> s 13/anst

141 L3

1253464 ANST/RL

L15

0 L3/ANST

(L3 (L) ANST/RL)

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NEWS 5 NOV 26 Two new SET commands increase convenience of STN searching
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NEWS 8 DEC 17 Fifty-one pharmaceutical ingredients added to PS
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NEWS 11 FEB 02 Simultaneous left and right truncation (SLART) added for CERAB, COMPUB, ELCOM, and SOLIDSTATE
NEWS 12 FEB 02 GENBANK enhanced with SET PLURALS and SET SPELLING
NEWS 13 FEB 06 Patent sequence location (PSL) data added to USGENE
NEWS 14 FEB 10 COMPENDEX reloaded and enhanced
NEWS 15 FEB 11 WTEXTILES reloaded and enhanced
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NEWS 18 FEB 23 Several formats for image display and print options discontinued in USPATFULL and USPAT2
NEWS 19 FEB 23 MEDLINE now offers more precise author group fields and 2009 MeSH terms
NEWS 20 FEB 23 TOXCENTER updates mirror those of MEDLINE - more precise author group fields and 2009 Mesh terms
NEWS 21 FEB 23 Three million new patent records blast AEROSPACE into STN patent clusters

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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E2           1 SULFONEX/BI
E3           2 --> SULFONYLHYDRAZIDE/BI
E4           5 SULFONI/BI
E5           1 SULFONIAZID/BI
E6           3 SULFONIAZIDE/BI
E7      392868 SULFONIC/BI
E8           2 SULFONICOTIN/BI
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E10          2 SULFONICOTINIC/BI
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E12          1 SULFONIAZOLE/BI

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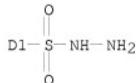
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L1 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2009 ACS on STN
RN 56803-51-1 REGISTRY
ED Entered STN: 16 Nov 1984

CN Benzenesulfonic acid, methylenebis-, dihydrazide (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Methylenebis(benzenesulfonhydrazide)
MF C13 H16 N4 O4 S2
CI IDS, COM
LC STN Files: CA, CAPLUS



1/2 [D1—CH₂—D1]



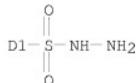
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1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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L1 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2009 ACS on STN
RN 56803-51-1 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzenesulfonic acid, methylenebis-, dihydrazide (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Methylenebis(benzenesulfonhydrazide)
MF C13 H16 N4 O4 S2
CI IDS, COM
LC STN Files: CA, CAPLUS



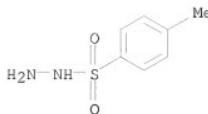
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L1 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2009 ACS on STN
RN 1576-35-8 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzenesulfonic acid, 4-methyl-, hydrazide (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN p-Toluenesulfonic acid, hydrazide (6CI, 7CI, 8CI)
OTHER NAMES:
CN (4-Methylphenylsulfonyl)hydrazine
CN (4-Tolylsulfonyl)hydrazide
CN (p-Tolylsulfonyl)hydrazine
CN 4-Methylbenzenesulfonic acid hydrazide
CN 4-Methylbenzenesulfonohydrazide
CN 4-Methylbenzenesulfonyl hydrazide
CN 4-Methylphenylsulfonyl hydrazide
CN 4-Toluenesulfonic acid hydrazide
CN 4-Toluenesulfonohydrazine
CN Cellmic AH
CN Cellmic H
CN Celogen TSH
CN Genitron PTS
CN NSC 18715
CN p-Methylbenzenesulfonic acid hydrazide
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CN p-Tolylsulfonyl hydrazide
CN p-Tosyl hydrazide
CN p-Tosylhydrazine
CN Porofor TSH 75
CN Toluene-4-sulfonohydrazide
CN Toluene-4-sulfonyl hydrazide
CN Toluene-4-sulphonyl hydrazide
CN Tosylhydrazide
CN Tosylhydrazine
CN Unifor H
CN Unifor NH 500
DR 344295-58-5
MF C7 H10 N2 O2 S
CI COM
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CHEMINFORMRX, CHEMLIST, CSCHM, CSNB, GMELIN*, IFICDB, IFIPAT, IFIUDB,
MEDLINE, MSDS-OHS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2,
USPATFULL, USPATOLD
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Other Sources: DSL**, EINECS**, TSCA**
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 17 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1824 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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 L2 1825 L1

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L2 1825 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN
 CC 75-8 (Crystallography and Liquid Crystals)
 Section cross-reference(s): 22, 25
 TI N-[1-(2,4-Difluorophenyl)ethylidene]-4-methylbenzenesulfonohydrazide
 ST crystal structure difluorophenylethylidenemethylbenzenesulfonohydrazide;
 mol structure difluorophenylethylidenemethylbenzenesulfonohydrazide;

hydrogen bond difluorophenylethylidenemethylbenzenesulfonohydrazide
IT Hydrogen bond
 (in [(difluorophenyl)ethylidene]methylbenzenesulfonohydrazide)
IT Crystal structure
Molecular structure
 (of [(difluorophenyl)ethylidene]methylbenzenesulfonohydrazide)
IT 1576-35-8, 4-Methylbenzenesulfonohydrazide
RL: RCT (Reactant); RACT (Reactant or reagent)
 (condensation reaction with (difluorophenyl)ethanone)
IT 364-83-0, 1-(2,4-Difluorophenyl)ethanone
RL: RCT (Reactant); RACT (Reactant or reagent)
 (condensation reaction with methylbenzenesulfonohydrazide)
IT 1053180-56-5P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and crystal and mol. structure of)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L2 1825 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN
IC ICM C08L029-04
CC 38-3 (Plastics Fabrication and Uses)
TI Resin compounds with fragrance for noise-blocking pads of architectures comprising ethylene-vinyl acetate copolymer
ST fragrance sound insulator architecture EVA polymer; blowing agent EVA polymer sound insulator
IT Blowing agents
Construction materials
Deodorants
Perfumes
Sound insulators
 (resin compds. containing ethylene-vinyl acetate copolymer with fragrance for noise-blocking pads for architectures)
IT Terpenes, uses
RL: MOA (Modifier or additive use); USES (Uses)
 (resin compds. containing ethylene-vinyl acetate copolymer with fragrance for noise-blocking pads for architectures)
IT 1309-42-8, Magnesium hydroxide 1309-48-4, Magnesium oxide, uses 39366-43-3, Magnesium-aluminum hydroxide
RL: MOA (Modifier or additive use); USES (Uses)
 (resin compds. containing ethylene-vinyl acetate copolymer with fragrance for noise-blocking pads for architectures)
IT 80-51-3, p,p'-Oxybis(benzenesulfonyl hydrazide) 101-25-7, N,N'-Dinitrosopentamethylene tetramine 123-77-3, Azodicarbonamide 1576-35-8, p-Toluenesulfonylhydrazide 10396-10-8, p-Toluenesulfonyl semicarbazide
RL: NUU (Other use, unclassified); USES (Uses)
 (resin compds. containing ethylene-vinyl acetate copolymer with fragrance for noise-blocking pads for architectures)
IT 24937-78-8, Ethylene-vinyl acetate copolymer
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (resin compds. containing ethylene-vinyl acetate copolymer with fragrance for noise-blocking pads for architectures)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L2 1825 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN
IC ICM C07D401-04
ICS C07D213-84; A61K031-4439; A61P025-04
CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1, 63
TI Fluoro-, chloro- and cyano-pyridin-2-yl-tetrazoles as ligands of the

metabotropic glutamate receptor 5
ST pyridinyl tetrazole prepn metabotropic glutamate receptor 5 modulator
IT Pain
(acute, treatment of; preparation of phenyl(pyridinyl)tetrazoles as ligands
of the metabotropic glutamate receptor 5)
IT Pain
(chronic, treatment of; preparation of phenyl(pyridinyl)tetrazoles as
ligands of the metabotropic glutamate receptor 5)
IT Glutamate receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(metabotropic, mGluR5, modulation of; preparation of
phenyl(pyridinyl)tetrazoles as ligands of the metabotropic glutamate
receptor 5)
IT Analgesics
Gastrointestinal agents
Human
(preparation of phenyl(pyridinyl)tetrazoles as ligands of the metabotropic
glutamate receptor 5)
IT Digestive tract, disease
Mental and behavioral disorders
Nervous system, disease
(treatment of; preparation of phenyl(pyridinyl)tetrazoles as ligands of the
metabotropic glutamate receptor 5)
IT 507268-74-8P, 3-[5-(5-Bromopyridin-2-yl)-2H-tetrazol-2-yl]-5-
fluorobenzonitrile
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate; preparation of phenyl(pyridinyl)tetrazoles as ligands of the
metabotropic glutamate receptor 5)
IT 507269-27-4P, 3-Fluoro-5-(5-pyridin-2-yl-2H-tetrazol-2-yl)benzonitrile
859509-04-9P, 3-Fluoro-5-[5-(5-fluoropyridin-2-yl)-2H-tetrazol-2-
yl]benzonitrile 859509-06-1P, 3-[5-(5-Chloropyridin-2-yl)-2H-tetrazol-2-
yl]-5-fluorobenzonitrile 859509-08-3P,
6-[2-(3-Cyano-5-fluorophenyl)-2H-tetrazol-5-yl]nicotinonitrile
859509-09-4P, 3-[5-(5-Fluoropyridin-2-yl)-2H-tetrazol-2-yl]-5-
(methoxymethyl)benzonitrile 859509-14-1P,
3-Fluoro-5-[2-(5-fluoropyridin-2-yl)-2H-tetrazol-5-yl]benzonitrile
859509-15-2P, 6-[5-(3-Cyano-5-fluorophenyl)-2H-tetrazol-2-
yl]nicotinonitrile 859509-16-3P,
3-[2-(5-Chloropyridin-2-yl)-2H-tetrazol-5-yl]-5-fluorobenzonitrile
859509-17-4P, 5-Fluoro-2-[2-(3-fluoro-5-methoxyphenyl)-2H-tetrazol-5-
yl]pyridine 859509-18-5P, 3-[5-(5-Fluoropyridin-2-yl)-2H-tetrazol-2-yl]-
5-methoxybenzonitrile 859509-19-6P,
3-[5-(5-Fluoropyridin-2-yl)-2H-tetrazol-2-yl]-5-
(trifluoromethoxy)benzonitrile 859509-20-9P,
3-(Difluoromethoxy)-5-[5-(5-fluoropyridin-2-yl)-2H-tetrazol-2-
yl]benzonitrile 859509-21-0P, 3-[5-(5-Fluoropyridin-2-yl)-2H-tetrazol-2-
yl]-5-(2-methoxyethoxy)benzonitrile 859509-22-1P,
3-(Ethylamino)-5-[5-(5-fluoropyridin-2-yl)-2H-tetrazol-2-yl]benzonitrile
859509-23-2P, 3-Amino-5-[5-(5-fluoropyridin-2-yl)-2H-tetrazol-2-
yl]benzonitrile 859509-24-3P, 3-[5-(5-Fluoropyridin-2-yl)-2H-tetrazol-2-
yl]-5-iodobenzonitrile
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(drug candidate; preparation of phenyl(pyridinyl)tetrazoles as ligands of the
metabotropic glutamate receptor 5)
IT 31181-88-1P, 5-Fluoropyridine-2-carboxaldehyde 42268-88-2P,
5-Bromomethylisophthalic acid dimethyl ester 155940-60-6P, Dimethyl
5-methoxymethylisophthalate 210992-28-2P, 3-Amino-5-fluorobenzonitrile
327056-62-2P, 5-Fluoropyridine-2-carbonitrile 453565-82-7P,

3-Cyano-5-methoxymethylbenzoic acid 453565-84-9P,
3-Cyano-5-methoxymethylbenzoic acid methyl ester 859509-05-0P
859509-07-2P 859509-10-7P, 3-Amino-5-methoxymethylbenzonitrile
859509-11-8P, (3-Cyano-5-methoxymethylphenyl)carbamic acid tert-butyl
ester 859509-12-9P, 5-Methoxymethylisophthalamic acid methyl ester
859509-13-0P, 5-Methoxymethylisophthalic acid monomethyl ester
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(intermediate; preparation of phenyl(pyridinyl)tetrazoles as ligands of the
metabotropic glutamate receptor 5)
IT 1576-35-8, p-Toluenesulfonyl hydrazide 31181-89-2,
5-Chloropyridine-2-carboxaldehyde 55338-73-3,
5-Aminopyridine-2-carbonitrile 109862-53-5, Dimethyl
5-hydroxymethylisophthalate 110882-60-5, 3-Fluoro-5-nitrobenzonitrile
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; preparation of phenyl(pyridinyl)tetrazoles as ligands of
the metabotropic glutamate receptor 5)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s 11/anst
1825 L1
1253464 ANST/RL
L3 11 L1/ANST
(L1 (L) ANST/RL)

=> s 11/arg
1825 L1
206526 ARG/RL
L4 2 L1/ARG
(L1 (L) ARG/RL)

=> d 14 4 ibib abs
2 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE
The answer numbers requested are not in the answer set.
ENTER ANSWER NUMBER OR RANGE (1):2

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:932411 CAPLUS
DOCUMENT NUMBER: 138:147880
TITLE: Stable isotope dilution high-performance liquid
chromatography-electrospray ionization mass
spectrometry method for endogenous 2- and
4-hydroxyestrones in human urine
AUTHOR(S): Xu, Xia; Ziegler, Regina G.; Waterhouse, David J.;
Saavedra, Joseph E.; Keefer, Larry K.
CORPORATE SOURCE: Epidemiology and Biostatistics Program, Division of
Cancer Epidemiology and Genetics, National Cancer
Institute, Bethesda, MD, 20892, USA
SOURCE: Journal of Chromatography, B: Analytical Technologies
in the Biomedical and Life Sciences (2002), 780(2),
315-330
CODEN: JCBAAI; ISSN: 1570-0232
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A sensitive, precise and accurate stable isotope dilution HPLC-electrospray
ionization mass spectrometry method has been developed for measuring
endogenous 2- and 4-hydroxyestrones, the main catechol estrogens in human
urine. Compared to the published methods using gas chromatog.-mass
spectrometry, this approach simplifies sample preparation and increases the
throughput of anal. The unique part of the authors' method is the use of

a simple and rapid derivatization step that forms a hydrazone at the C-17 carbonyl group of catechol estrogens. This derivatization step has greatly enhanced method sensitivity as well as HPLC separability of 2- and 4-hydroxyestrones. Standard curves were linear over a 100-fold calibration range with correlation coeffs. for the linear regression curves typically greater than 0.996. The lower limit of quantitation for each catechol estrogen is 1 ng per 10-mL urine sample, with an accuracy of 97-99% and overall precision, including the hydrolysis, extraction and derivatization steps, of 1-3% for samples prepared concurrently and 2-11% for samples prepared in several batches. This method is adequate for measuring the low endogenous levels of catechol estrogens in urine from postmenopausal women.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> 1
1 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (>).

=> d 14 1 ibib abs

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:690866 CAPLUS
DOCUMENT NUMBER: 141:307724
TITLE: Measuring seven endogenous ketolic estrogens simultaneously in human urine by high-performance liquid chromatography-mass spectrometry
AUTHOR(S): Xu, Xia; Keefer, Larry K.; Waterhouse, David J.; Saavedra, Joseph E.; Veenstra, Timothy D.; Ziegler, Regina G.
CORPORATE SOURCE: Laboratory of Proteomics and Analytical Technologies, SAIC-Frederick Inc., National Cancer Institute at Frederick, Frederick, MD, 21702, USA
SOURCE: Analytical Chemistry (2004), 76(19), 5829-5836
CODEN: ANCHAM; ISSN: 0003-2700
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A rapid, sensitive, and specific high-performance liquid chromatog.-electrospray ionization-multistage mass spectrometry (MS) method for measuring endogenous ketolic estrogen metabolites in human urine has been developed. The method requires a single hydrolysis/extraction/derivatization step and only 2.5 mL of urine, yet is able to simultaneously quantify estrone and its 2-methoxy and 2-, 4-, and 16 α -hydroxy derivs., 16 α -ketoestradiol, and 2-hydroxyestrone-3-Me ether metabolites. The combination of a simple hydrazone derivatization step with multistage MS greatly enhances the sensitivity and specificity of the anal. of endogenous estrogen within human urine. Standard curves are linear over a 100-fold concentration range with linear regression correlation coeffs. typically greater than 0.99. The lower limit of quantitation for each ketolic estrogen is 0.2 ng/2.5-mL urine sample (10 pg on column), with an accuracy of 93-103% and an overall precision, including the hydrolysis, extraction, and derivatization steps, of 1-13% relative standard derivation (RSD) for samples prepared concurrently and 8-16% RSD for samples prepared in sep. batches. This method also allows for the identification of 2-hydroxyestrone-3-Me ether in urine obtained from both pre- and postmenopausal women. This potentially protective estrogen metabolite has been previously reported only in the urine of pregnant women. Since individual patterns of estrogen metabolism may influence the risk of breast

cancer, accurate and specific measurement of estrogen metabolites in biol. matrixes will facilitate future research on breast cancer prevention, screening, and treatment.

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> logoff

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:y

COST IN U.S. DOLLARS

SINCE FILE

ENTRY SESSION

14.98 29.10

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

ENTRY SESSION

-1.64 -1.64

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STN INTERNATIONAL LOGOFF AT 19:43:00 ON 23 FEB 2009